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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,020

10/23/2006

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08/12/2011

EXAMINER

JUSKA, CHERYL ANN

ART UNIT

PAPER NUMBER

1798

MAIL DATE

DELIVERY MODE

08/12/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,020	Applicant(s) ROKKJAER, RENNO HJORTH	
	Examiner CHERYL JUSKA	Art Unit 1798	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 20, 2011, has been entered.

Response to Amendment

2. Applicant's amendment filed with the RCE has been entered. Claims 12-14, 19, and 25 have been amended as requested. Claims 1-11 have been cancelled. Thus, the pending claims are 12-35.
3. The amendment to claim 12 is sufficient to withdraw the anticipation rejection of claims 12-19 by the Higgins '410 reference. Specifically, said reference lacks a teaching to the newly recited rolling and unrolling steps.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 12 recites the limitation “unrolling the semi-finished carpet pile product and the felt backing.” There is insufficient antecedent basis for this limitation in the claim since neither the product nor the backing are previously limited to being in roll form.

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 27 and 30 stand rejected under 35 U.S.C. 102(e) as being anticipated by US 2004/0253410 issued to Higgins et al. as set forth in section 7 of the last Office Action.

Independent claims 27 and 30 have not been amended in an attempt to overcome the standing anticipation rejections. As such, said rejections are maintained.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 12-26, 28, 29, and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/0253410 issued to Higgins et al. in view of US 2009/0081406, US 2007/0154672, and/or US 2004/0022994, all issued to Higgins et al.

Higgins discloses a surface covering element (e.g., carpet tile) having a friction enhancing coating disposed on the underside (abstract and section [0026]). The carpet may comprise face yarns tufted or bonded to a backing structure and may include a cushioning material (section [0026]). In one embodiment, the carpet tile includes a cushion layer 178, which may be a layer of foam, rebond foam, or a felt or other nonwoven, and optionally, a secondary backing layer 178 of a woven or nonwoven fabric (sections [0027], [0074], [0076] and Figures 13A-D). The friction enhancing coating, which may be a latex composition, can be applied by roll coating, spray coating, impregnation, powder coating, or a printing method (sections [0123] and [0124] and claims 5-8). After coating, a drying or curing process is employed (section [0124]). Said coating may be present in an amount not greater than 50 g/m² dry matter (claim 2). The carpet substrate is cut into various tile shapes (sections [0020] and [0021]).

The Higgins teaching of an embodiment of a carpet tile including a felt layer as the cushion layer, an optionally omitted fabric secondary backing, and a latex friction enhancing coating read on applicant's felt backing and cured polymer layer as recited in claims 12 and 16-19. Alternatively, if the cushion layer is absent (e.g., Figures 23A-23F) or considered part of the semi-finished product (e.g., primary carpet substrate), then the optionally present felt nonwoven secondary backing and friction enhancing coating read on applicant's felt backing and cured polymer layer.

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Thus, Higgins teaches the invention of claims 12 and 16-19 with the exception of the steps of unrolling the semi-finished pile product and felt backing, rolling the carpet web, and unrolling the carpet web. However, these rolling and unrolling steps would have been readily obvious to a skilled artisan. Specifically, textile webs involved in the making of carpets and carpet webs are commonly rolled for storage and/or transfer from one process line to another. For example, as a carpet is tufted (e.g., greige carpet or semi-finished carpet pile product), it is rolled upon a beam for storage before transferring to a backcoating station or other station where a secondary backing is joined thereto. Similarly, the secondary backing (e.g., felt backing) is prepared and stored on a roll until transfer to a station for joining to the semi-finished carpet pile product. Furthermore, once a carpet web is produced from the combination of the greige carpet and the secondary backing it is commonly rolled until further use as a final broadloom carpet product or for further processing into carpet tiles. See, for example, Higgins '406, Figures 6 and 9, sections [0220] – [0222] and [0233] – [0252], Higgins '672, Figures 14A and 14B, section [0082], and Higgins '994, Figure 2, section [0127]. Thus, it would have been readily obvious to one of ordinary skill in the art to employ the rolling and unrolling steps claimed by applicant in order to facilitate the manufacture of the carpet tiles. Inclusion of such rolling and unrolling steps would have yielded predictable results to said skilled artisan. Therefore, claims 12 and 16-19 are rejected as being obvious over the prior art.

Regarding 13, Higgins '410 teaches embodiment where the cushion layer is bonded directly to the primary carpet substrate by means of an adhesive layer (e.g., Figure 14C). Hence, claim 13 is also rejected as being obvious over the prior art.

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With respect to claims 14 and 15, since Higgins '410 teaches other adhesive layers (e.g., 124, 160) may be a latex or hot melt adhesive, like the friction enhancing coating, said claims are also obvious over the prior art.

While Higgins '410 fails to explicitly teach suitable curing conditions, claims 20-22 are rejected as being obvious over the prior art. Specifically, a skilled artisan readily understands methods of curing polymers, wherein said method and temperature depends on the polymer being cured and the thermal stability of the adjoining layers. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Thus, claims 20-22 are rejected as being obvious over the prior art.

Regarding claims 23, 24, 31, and 32, Higgins '410 fails to teach the basis weight of the felt cushion layer. However, it would have been obvious to a skilled artisan to select a basis weight within the range of 200-1500 g/m² in order to provide sufficient cushioning properties. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Thus, claims 23, 24, 31, and 32 are rejected as being obvious over the prior art.

Regarding claims 25, 26, 33, and 34, Higgins '410 fails to teach a coating weight greater than 50 g dry matter/m². However, it would have been obvious to increase the amount of coating in order to provide an increase in overall thickness, enhanced frictional properties, and/or improved dimensional stability. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215. Thus, claims 25, 26, 33, and 34 are rejected as being obvious over the prior art.

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With respect to claims 28, 29, and 35, Higgins '410 fails to specifically teach a plant including storage, unwinding, or coiling units or that the application, curing, and punching units are an independent part of the plant. However, as noted above, the other cited Higgins references disclose such storage rolls and rolling and unrolling stations. As such, it would have been obvious to include various units which facilitate the manufacture of the disclosed carpet tiles. Additionally, it would have been obvious to arrange said units as needed for the manufacture process. Absent a showing of unexpected results obtained from the plant features, said features are held to being within the level of ordinary skill in the art. Thus, claims 28, 29, and 35 are rejected as being obvious over the prior art.

Response to Arguments

11. Applicant's arguments filed with the RCE have been fully considered but they are not persuasive.

12. Applicant traverses the rejection of the claims over the Higgins '410 reference by arguing that Higgins does not even consider maintaining flexibility to allow for manufacture on standard carpet equipment (Amendment, paragraph spanning pages 8-9 and paragraph spanning pages 11-12). This argument is unpersuasive. Specifically, applicant's claims do not specifically limit a degree of flexibility, but rather claim 12 merely requires the carpet web have sufficient flexibility to be rolled. Additionally, only independent claim 12, and not independent claims 27, 30, and 35, require rolling and unrolling steps for the carpet web. Thus, applicant's arguments are not commensurate in scope with claims 27, 30, and 35. Furthermore, claim 12 limits the rolling and

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unrolling steps to the carpet web *prior to* coating with the polymer and curing said polymer. The claims do not require the carpet to be flexible or rolled after curing of the polymer coating.

13. Applicant asserts “most of the surfaces disclosed in Higgins, other than carpet, are rigid so that for most of the surfaces in Higgins retaining flexibility is of no advantage” (Amendment, paragraph spanning pages 8-9). This argument is unpersuasive since there is nothing on record showing that the Higgins ‘410 carpet web prior to applying the friction enhancing coating, or even after said coating, are sufficiently rigid as to not be capable of rolling and unrolling.

14. Applicant also argues “the present invention specifically achieves the desired rigidity of the carpet square without using PVC or bitumen whereas Higgins teaches a carpet layers with multiple PVC layers” (Amendment, paragraph spanning pages 11-12). In response, applicant’s claims do not exclude the presence of PVC or bitumen. Hence, applicant’s argument is not commensurate in scope with the claimed invention. Thus, applicant’s arguments are found unpersuasive and the obviousness rejection stands.

15. It is suggested that applicant amend the claims to further distinguish the materials and structure of the present cured polymer layer from the friction enhancing layer of Higgins ‘410. Additionally, the claims could be amended to further define the structure of the carpet produced by excluding certain other layers disclosed by Higgins ‘410 (e.g., PVC).

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the

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examiner by telephone are unsuccessful, the examiner can be emailed at cheryl.juska@uspto.gov or the examiner's supervisor, Angela Ortiz can be reached at 571-272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cheryl Juska/
Primary Examiner
Art Unit 1798

cj
August 12, 2011